



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)



VTR UGE - 2021

ACADEMIC REGULATIONS for B.Tech. PROGRAMMES

For the Student admitted from the Academic Year 2021-2022

(Including the amendments approved in the 48th meeting of the
Academic Council held on February 22, 2025)

Contents

1	SHORT TITLE AND COMMENCEMENT	1
2	DEFINITIONS	1
3	ACADEMIC PROGRAMMES	2
3.1	Nomenclature of Programmes	2
4	DURATION OF THE PROGRAMME	4
4.1	Minimum Duration of the Programme	4
4.2	Maximum Duration of the Programme	4
4.3	Minimum Duration of the Semester	4
5	ADMISSION CRITERIA	4
6	CREDIT SYSTEM AND GRADE POINTS	5
6.1	Credit Definition	5
6.2	Credit Structure	5
6.3	Course Registration	5
6.4	Course Registration after Minimum Duration of the Program (Extended Registration)	6
6.5	Grade Points and Letter Grade for a Course	6
6.6	Semester Grade Points Average (SGPA)	6
6.7	Cumulative Grade Point Average (CGPA)	7
6.8	Course Numbering Scheme	8
7	CURRICULUM FRAMEWORK	9
7.1	Preamble	9
7.2	Programme Structure	9
7.2.1	Foundation Courses	9
7.2.2	Programme Core Courses	10
7.2.3	Programme Electives Courses	10
7.2.4	Open Electives Courses	11
7.2.5	Independent Learning	11
7.2.6	Industry/Higher Learning Institute Interaction	18
7.2.7	Professional Proficiency Courses	19

7.2.8	Mandatory Courses	19
7.2.9	Complementary Skill Courses	19
7.2.10	Special Curricular Accomplishments	19
7.3	Minimum Credits Required in Various Course Categories	21
7.3.1	Regular Students	21
7.3.2	Lateral Entry Students	21
7.4	Options for students in Four year UG Engineering & Technology Programme and Eligibility	22
7.4.1	Four-year program in B.Tech.	22
7.4.2	B.Tech Programme with Specialization	22
7.4.3	B.Tech. Programme with Minor Degree	23
7.4.4	B.Tech. Programme with Honours	25
7.5	Intensive Semester (Short summer term(s))	26
7.6	Medium of Instruction and Examination	26
8	EXAMINATIONS AND SCHEME OF EVALUATION	26
8.1	Description	26
8.2	Scheme of Continuous Evaluation	27
8.3	Scheme of Semester End Examination	30
8.4	Scheme of Evaluation for Complementary Skill Courses	33
8.4.1	Sports	33
8.4.2	Yoga	33
8.4.3	National Cadet Corps	33
8.4.4	National Service Scheme (NSS)	34
8.4.5	Extra Curricular Activities	34
8.4.6	English Proficiency Certification	34
8.4.7	Globally Accepted Certification Courses as approved by the respective Board of Studies	35
8.4.8	Co-curricular Activities	35
8.5	Conditions for Pass	37
8.6	Reregistration	38
9	CRITERIA TO ATTEND SEMESTER END EXAMINATION AND PROMOTION TO HIGHER SEMESTER	39

9.1 Eligibility for Semester End Examinations	39
10 BREAK IN STUDY	39
11 TRANSITORY	40
12 MIGRATION	41
12.1 Cases of migration	41
12.2 Migration from one department of a school to another within the same school in the university	41
12.3 Migration from one department of a school to another school in the university	42
12.4 Migration from any other university in India to Vel Tech with or with- out change in Department	42
12.5 Migration from any foreign university to Vel Tech with or without change in Department	43
12.6 Course work for migration students	43
13 ELIGIBILITY FOR AWARD OF B.Tech. DEGREE	43
13.1 Four-year program in B.Tech. - Regular Students	43
13.2 Three-year program in B.Tech. - Lateral Entry Students	44
13.3 B.Tech. Programme with Specialization	44
13.4 B.Tech Programme with Minor Degree	45
13.5 B.Tech. Programme with Honors	45
13.6 Award of Division	45
13.7 Consolidated Grade Card	46
14 DISCIPLINE	46
15 MALPRACTICES	47
16 OTHER MATTERS	47
17 AMENDMENTS TO REGULATIONS	48

List of Tables

1	Typical credit Allocation scheme for courses	5
2	Grade points and letter grade scheme for a course	6
3	List of Complementary Skill Courses	20
4	Minimum credits required for Regular students in various course categories	21
5	Minimum credits required for Lateral Entry students in various course categories	22
6	Eligibility credit details for Programme specialization	23
7	Attendance marks for theory courses	28
8	Rubrics for evaluation of laboratory experiment	28
9	Rubrics for evaluation of model laboratory test experiment	29
11	Rubrics for evaluation of laboratory test experiment in theory dominated integrated course	29
12	Continuous assessment scheme for project work	30
13	Rubrics for evaluation of semester end laboratory examination	31
14	Rubrics for evaluation of semester end laboratory examination in practical dominated course	31
15	Sports	33
16	Yoga	33
17	National Cadet Corps	33
18	National Service Scheme (NSS)	34
19	Extra Curricular Activities	34
20	English Proficiency Certification	34
21	English Proficiency Certification	35
22	Co-curricular Activities	35
23	Co-curricular Activities	36
25	Criteria for award of division	45

1 SHORT TITLE AND COMMENCEMENT

- a) The regulations listed under this Section are common for Engineering Degree Undergraduate level programmes (B.Tech.) offered by Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology (Deemed to be University u/s 3 of UGC act, 1956) with effect from the academic year 2021-22 and they are called “**VTR UGE - 2021**”.
- b) The here under are subject to amendments as may be made by the Academic Council of the Institution (Deemed to be University) from time to time, keeping the recommendations of the Board of Studies (BOS) in view. Any or all such amendments shall be effective from such date and to such batches of students including those already undergoing the programme, as may be decided by the Academic Council.

2 DEFINITIONS

- a) “Commission” means University Grants Commission (UGC).
- b) “Council” means All India Council for Technical Education (AICTE).
- c) “University” means Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology.
- d) “Programme” means cohesive arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the award of a degree.
- e) “Course” means a unit of teaching, which encompasses various topics, that typically lasts one semester, is led by one or more faculty and has a fixed set of registered students.
- f) “Degree” means an academic degree conferred by the University upon those who complete the undergraduate programme successfully.
- g) “Regular Students” means students enrolled into the four year programme in the first year.
- h) “Lateral entry Students” means students enrolled into the four year programme in the second year.
- i) “Academic Year” means constituting of two consecutive (one odd + one even) semesters.
- j) “Choice Based Credit System” means providing choice for students to select courses from the prescribed course categories (core, elective, value-

based, complementary skill courses), in the preferred semester complying prerequisites and based on their learning aptitudes.

3 ACADEMIC PROGRAMMES

3.1 Nomenclature of Programmes

3.1.1 The nomenclature and its abbreviation given below shall continue to be used for the degree programmes under the University, as required by the Council and the Commission.

- a) **Bachelor of Technology shall be abbreviated as B.Tech. in parenthesis.** Besides, the subject of the programme shall be indicated. For example undergraduate (UG) degree programme in Mechanical Engineering shall be mentioned as

Bachelor of Technology (B.Tech.)
in
Mechanical Engineering

- b) Undergraduate (UG) engineering degree programme with specialization, specialization shall be indicated in parenthesis after the subject of the program. For example undergraduate (UG) degree programme in Computer Science and Engineering with specialization in Network & Cyber Scurity shall be mentioned as

Bachelor of Technology (B.Tech.)
in
Computer Science and Engineering
(with specialization in Network & Cyber Scurity)

- c) Undergraduate (UG) engineering degree programme with minor, minor degree shall be indicated after the subject of the program. For example, undergraduate (UG) degree programme in Electronics and Communication Engineering with minor in Blockchain Technology shall be mentioned as

Bachelor of Technology (B.Tech.)
in
Electronics and Communication Engineering with
Minor Degree in Blockchain Technology

- d) Undergraduate (UG) engineering degree programme with Honors, Honors shall be indicated after the subject of the program. For example, undergraduate (UG) degree programme in Computer Science and Engineering with Honors shall be mentioned as

Bachelor of Technology (Honors)
in
Computer Science and Engineering
(in specialization with Cyber Security)

3.1.2 Bachelor of Technology (B. Tech.) degree programmes are offered in:

1. Aeronautical Engineering
2. Biomedical Engineering
3. Biotechnology
4. Civil Engineering
5. Computer Science and Engineering
6. Electronics and Communication Engineering
7. Electrical and Electronics Engineering
8. Information Technology
9. Mechanical Engineering
10. Artificial Intelligence(AI) and Data Science
11. Artificial Intelligence and Machine Learning
12. Computer Science and Design
13. Computer Science and Engineering (Cyber Security)
14. Computer Science and Engineering (Data Science)
15. Computer Science and Engineering (Artificial Intelligence and Machine Learning)

If the university on the recommendation of Academic Council offers any other new programme(s)/ specialization(s) or modify the existing programme(s)/specialization the same shall be applicable.

4 DURATION OF THE PROGRAMME

4.1 Minimum Duration of the Programme

- 4.1.1** The minimum duration of the programme for regular students shall be four years consisting of eight semesters.
- 4.1.2** The minimum duration of the programme for lateral entry students, who are admitted in the second year, shall be three years consisting of six semesters.

4.2 Maximum Duration of the Programme

The maximum duration which a student can take to complete a programme shall be as follows for students admitted from 2016 -17 academic year onwards:

- a) *Maximum duration = $N+4$ years, where N stands for the minimum duration (In Years) prescribed for completion of the programme.*
- b) *Under any exceptional circumstance, a further extension of one more year may be granted subject to approval of Vice-chancellor for the requisition made by the student.*
- c) *During the extended period the student shall be considered as a private candidate and also not eligible for first class.*

4.3 Minimum Duration of the Semester

Each semester consists of a minimum of 90 instructional days as per the guidelines of Commission and Council.

5 ADMISSION CRITERIA

The eligibility criteria for admission into UG programmes are as per the norms of Commission, Council and Board of Management from time to time.

6 CREDIT SYSTEM AND GRADE POINTS

6.1 Credit Definition

A credit is the unit by which the course work is measured. It is based on the number of contact hours, 50 minutes, of instructions required per week. One credit is equivalent to one contact hour of lecturing/tutorial or two contact hours of practical work or three hours of field work per week.

6.2 Credit Structure

A typical credit structure for course work (B.Tech. Programme) based on the above definition is given in Table 1.

Table 1: Typical credit Allocation scheme for courses

Lectures(L)	Tutorials(T)	Practical(P)	Total Contact Hours	Total Credits (C)
4	-	-	4	4
3	2	-	5	4
3	-	2	5	4
2	-	4	6	4
3	-	-	3	3
2	2	-	4	3
2	-	2	4	3
1	-	4	5	3
2	-	-	-	2
-	-	4	4	2
1	-	-	1	1
-	-	2	2	1

6.3 Course Registration

- 6.3.1** The student shall register and withdraw the courses at least five working days before and after the commencement of the academic semester, respectively. The dates for registration and withdrawal shall be mentioned in the academic calendar. Maximum number of students allowed to register for a course shall be indicated against each course.
- 6.3.2** The student is eligible to register for a course if he/she fulfills the requirement of pre-requisites.
- 6.3.3** The student shall register a minimum of 15 credits in a semester and maximum of 25 credits, out of which minimum 12 credits shall be from Section

7.2.1 and/or 7.2.2.

6.3.4 The registration of minimum credits prescribed in Section 6.3.3 may be exempted in following cases:

6.3.4.1 The registration of minimum credits may fall below 15 credits if the student has acquired at least 135 credits subjected to the prior approval of the Dean of the school concerned.

6.3.4.2 The registration of minimum 12 credits from section 7.2.1 and/or 7.2.2 as prescribed in Section 6.3.3 may be exempted, if the student has acquired minimum 85 credits from section 7.2.1 and/or 7.2.2.

6.4 Course Registration after Minimum Duration of the Program (Extended Registration)

The student may register the courses after their minimum duration of the program as mentioned in Section 4.1, to fulfil the minimum credit requirement mentioned in Table 4/Table 5 by paying the requisite fee.

6.5 Grade Points and Letter Grade for a Course

The grade points and letter grade shall be awarded to student in each course based on his/her performance as per the grading system shown in Table 2.

Table 2: Grade points and letter grade scheme for a course

Range of Marks	Letter Grade	Grade Point
90-100	S	10
80-89	A	9
70-79	B	8
60-69	C	7
50-59	D	6
00-49	RA	0
Absent	AB	0

6.6 Semester Grade Points Average (SGPA)

It is a measure of performance of work done in a semester. It is the ratio of sum of product of credit and grade point earned by a student in various courses

in a semester and the sum of the credits earned in that semester. It shall be expressed up to two decimal places and shall be computed using the formula given below.

$$SGPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}.$$

where C_i denotes the credit earned in the i^{th} course,

n is the number of courses through which credits earned by a student in a semester and

G_i is the Grade Points secured by a student in the i th course.

SGPA shall be mentioned in the grade sheet as per the format below.

Total credits registered in a semester	Total credits earned in a semester	SGPA
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6.7 Cumulative Grade Point Average (CGPA)

It is a measure of cumulative performance of a student in a programme. The CGPA is the ratio of sum of product of credit and grade point earned by a student in various courses in all the semesters and total credits earned upto the current semester. It shall be expressed up to two decimal places and shall be computed using the formula given below.

$$CGPA = \frac{\sum_{i=1}^m C_i G_i}{\sum_{i=1}^m C_i}.$$

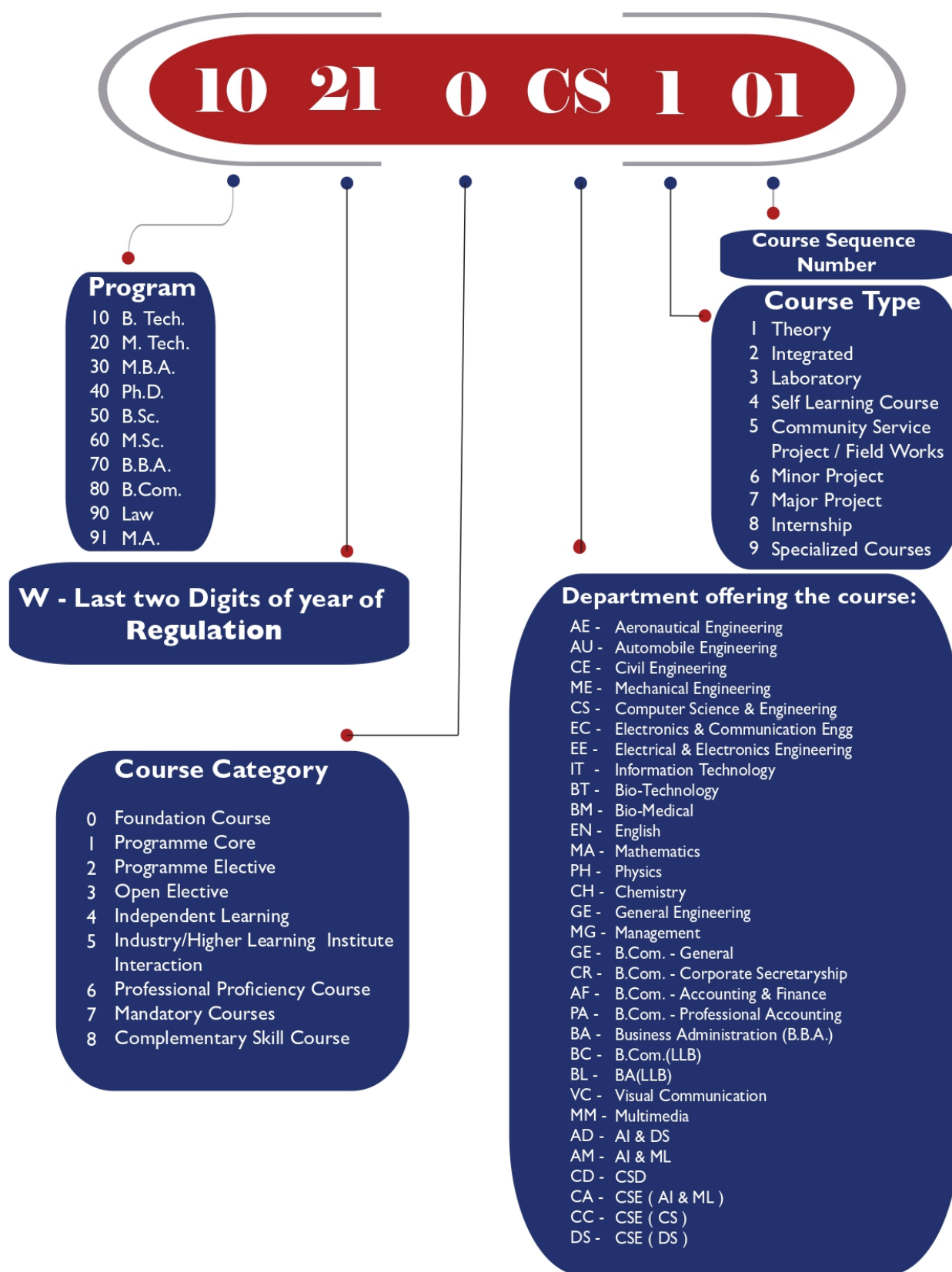
where

- C_i denotes the credit earned in the i th course,
- m is the number of courses through which credits earned by a student upto the current semester and
- G_i is the Grade Points secured by a student in the i^{th} course.

6.7.1 The CGPA shall be calculated as per section 6.7, considering the courses selected by the students, satisfying the prescribed norms in Section 13.

6.8 Course Numbering Scheme

The course number consists of digits/alphabets. A typical course number is illustrated below.



7 CURRICULUM FRAMEWORK

7.1 Preamble

- 7.1.1 Curriculum framework is important in setting the right direction for a Degree programme as it takes into account the type and quantum of knowledge necessary to be acquired by a student to qualify for an award in his/her chosen programme.
- 7.1.2 Besides, this also helps in assigning the credits for each course, sequencing the courses, and finally arriving at the total number of courses to be studied, and the total number of credits to be earned by a student to fulfill the requirements for the award of the degree.
- 7.1.3 Each theory course shall consist of five units.

7.2 Programme Structure

Choice Based Credit Structure (CBCS) is followed in the program, in order to promote

- a) Student Centred Learning
- b) Students to learn courses of their choice
- c) Interdisciplinary Learning

Students have the choice of choosing their courses in various categories. Apart from this, student also have the option of choosing various courses under programme specialization, minor, Honours degree.

The programme structure is designed in such a way that it facilitates the courses required to attain the expected knowledge, skills and attitude by the time of their graduation as per the needs of the stakeholders and Graduate Attributes of NBA, New Delhi. The programme structure consists of various course categories (as described in Sections 7.2.1 to 7.2.9) to cover the depth and breadth required for the programme and for the attainment of programme outcomes of the corresponding programme. The curriculum shall satisfy the programmes specific criteria recommended by professional bodies of the respective programme. Courses shall be offered under various categories as explained below, among which only programme core and programme elective courses shall have flexible credits while other courses shall have same fixed credits.

7.2.1 Foundation Courses

Foundation courses enhance the knowledge, skills and attitude of UG engineering graduates of all programmes to the expected level. The foundation courses

shall have the courses related to basic sciences and mathematics, basic engineering sciences and humanities and social sciences.

1. **Basic Sciences and Mathematics courses** may include courses such as Engineering Physics, Engineering Chemistry and Engineering Mathematics.
2. **Basic Engineering Science courses** may include courses such as Introduction to Computing, Basics of Electrical Engineering, Basics of Mechanical Engineering and Engineering Graphics.
3. **Humanities and Social Sciences courses** may include courses such as Technical English and Communication Skills, Professional Ethics, Environmental Studies and Engineering Economics and Finance.

7.2.2 Programme Core Courses

Programme core consists of set of courses considered necessary for the students of the specific programme. The courses and their contents under this category should satisfy the programme specific criteria prescribed by the appropriate professional societies. Each programme shall cover minimum three major areas pertaining to the programme.

7.2.3 Programme Electives Courses

Programme electives are the courses offered in the programme which covers depth and breadth to further strengthen the programme specific knowledge. The students may register for appropriate electives offered in the programme based on their area of interest.

- a) *Students may undertake one course under this category (Minimum 6 Credits and not more than 18 Credits totally for the entire programme duration) through an UGC/AICTE approved MOOC Platform - SWAYAM/NPTEL for the duration of 8 weeks (Mapped with 2 Credits) / 12 weeks (Mapped with 3 Credits) and produce NPTEL Certificates for credit transfer, as approved by the respective Board of Studies.*
- b) *Out of the above 18 credits, it is recommended that 3 credits may be offered by our Industry Partners/International Institutional partners (Under MoU/MoA arrangement entered by the office the University of Industry Relations / International Relations) and students shall be allowed to earn these credits under the collaborative arrangements.*

(Amended as per the 48th Meeting of the Academic Council held on February 22, 2025. (Item. No. 48.5))

7.2.4 Open Electives Courses

Open electives are the courses offered between the schools or by Industry partners or by Institutional partners to enhance the knowledge breadth and professional competency of the students. The students shall register for appropriate open electives, offered by other schools/Industry Partner/Institutional Partners (Under MoU/MoA Collaborative arrangements) based on the area of interest. The courses offered under this category cover the Interdisciplinary / Transdisciplinary / Multidisciplinary knowledge.

- a) *Students may undertake one course (Minimum 3 credits but not more than 12 Credits totally during the programme of study) under this category through an UGC/AICTE approved MOOC Platform - SWAYAM/ NPTEL for the duration of 8 weeks (Mapped with 2 Credits) / 12 weeks (Mapped with 3 Credits) and produce NPTEL Certificates for credit transfer, as approved by the respective Board of Studies..*
- b) *Out of the above 12 credits, a minimum 3 credits may be offered by our Industry Partners/International Institutional partners (Under MoU/MoA arrangement entered by the office the University of Industry Relations / International Relations) and students shall be allowed to earn these credits under the collaborative arrangements..*

(Amended as per the 48th Meeting of the Academic Council held on February 22, 2025. (Item. No. 48.5))

7.2.5 Independent Learning

The students are expected to learn the courses offered under this category on their own. The courses offered under this category include:

7.2.5.1 Community Service Project

The Community Service Project which carries one credit, helps students to find solutions to real life societal problems. They need to identify the problem, conduct literature survey and provide the feasible solution. Maximum of three in a group will carry out the project.

Guidelines of the Community Service Project as follows :

Amended as per the 41st Meeting of the Academic Council held on March 11, 2023. (Item. No. 41.10)

- **Objective :**

1. The students will gain practical understanding of real time problems in society and its challenges.

2. Apply their knowledge & skill, and technology available to solve the issue.
3. Students will learn to respond to social and practical needs.

• **Methodology :**

1. Student(s) as a team or individual will be carrying out survey at their location with the local community groups based on the domain knowledge.
2. Students may interact with local government authorities/communities to identify the problems.
3. Suggest a technology driven best solution in term of prototype model development or develop a new solution for solving the societal problems with the support of a faculty guide in the institution.

• **Evaluations :**

1. The community service project will be evaluated for the 100 marks. (Internal – 40, External - 60)
2. The Internal & External evaluations will be done as per clause 8.2.10 & 8.3.6 under the Regulations VTR UGE 2021.
3. The following components may be given due weightage in the evaluation of community service project.
 - a. Survey
 - b. Society relevant problem identification.
 - c. Regular interaction & updates with the local panchayat/community president.
 - d. Novel idea generation.
 - e. Prototype/Development of new solution.
 - f. Documentation via photo, video with authenticated signatures.
 - g. Final Report.

7.2.5.2 Minor Project and Summer Internship:

Instead of two “Minor Projects”, Students are expected to take-up one Minor Project for 2 credits and One Mandatory Summer Internship for 2 credits which shall be carried out during summer break for a duration of 4 to 8 weeks. (Amended as per the 48th Meeting of the Academic Council held on February 22, 2025. (Item. No. 48.5))

(a) Minor Project - 1

- *2 Credits / Group of Maximum of 3 Students are only allowed.*
- *It is necessary that department shall ensure at least 10% of total students take their minor project – 1 at the Centres/CoE of VTU Research Park.*

(b) Minor Project - 2 is substituted with Summer Internship

- *2 Credits / During summer break chosen by the school.*
- *Internship may be carried with (i) Nearby Industries or (ii) Centres/CoE of VTU Research Park or (iii) Research Projects listed by the respective departments or (iv) Collaborative projects with Institutional Partners.*
- *It is necessary that department shall ensure at least 10% of total students take their summer internship at the Centres/CoE of VTU Research Park.*

7.2.5.3 Major Project

Major Project, which carries 9 credits, shall be carried out by the students, maximum of three in a group, for a minimum period of one semester. The major project shall be carried out in the major areas pertaining to the programme approved by the Project Review Committee (PRC) and may address societal problems/issues related to the programme. In order to register for major project, the student shall be eligible for the minimum credits as required in Foundation Course (Section 7.2.1), Programme Core (Section 7.2.2) and Programme Elective (Section 7.2.3).

The minimum duration of the Major Project for B.Tech., programmes may be fixed as 4 months (one semester).

It is suggested that department shall ensure at least 10% of total students take their major project at the Centres/CoE of VTU Research Park and or Collaborative projects with Institutional Partners.

Amended as per the 41st Meeting of the Academic Council held on March 11, 2023. (Item. No. 41.11)

New Guidelines are shown below for those students opted their major project under VTU Research Park in the item 7.2.5.4. below.

The minor and major projects registered under clause 7.2.5 – Independent Learning, shall be carried out in the major areas/specialization pertaining to the programme approved by the Project Review Committee (PRC). The Minor/Major projects may be carried out in

1. Higher Learning Institutions in Abroad [or].
2. Research organizations in India/Abroad [or]
3. Industry in India [or]

4. In-House Project carried out in the institution.

There will be an external guide, who will be guiding the students in the respective organization under 1, 2 & 3 given above and one internal guide allotted by the PRC from the respective programme will monitor the progress of the student. In the case of In-House project, the guide from the institutions approved by the PRC will monitor the progress of the student. *Amended as per the 41st Meeting of the Academic Council held on March 11, 2023. (Item. No. 41.12)*

7.2.5.4 Guidelines for Minor Projects, Mandatory Summer Internship (7.2.5.2) and Major Projects (7.2.5.2) carried out with Centres/Centres of Excellence under VTU Research Park / VTU-TBI/VTU-IIC, monitored by the Office of the Industry Relations/International Relations. (Amended as per the 48th Meeting of the Academic Council held on February 22, 2025. (Item. No. 48.5))

Problem/Project Based Learning (PBL) approach

1. Purpose Ideation : *A problem/project Based learning approach is an initiative by the Office of Industry Relations designed to engage students in solving some of the most pressing challenges faced in Industries as well as in the society. Launched to foster a culture of innovation and practical problem-solving, Ideation provides a dynamic platform for students to develop and showcase their creative solutions to real-world problems. By encouraging students to think critically and innovatively, they are groomed to provide viable solutions to industry problems as well as to compete in the National and International platforms like Smart India Hackathon, etc. in solving societal problems through technological approach.*

2.Scope

- Ideation is open for the Under Graduate, Post Graduate and Research Scholars of all the Engineering and Technology branches of this Institution.
- Students who want to explore beyond the curriculum and apply the concepts in the real world.
- Students who want to compete in National Competitions and prove their proficiency
- Students who want to build a resume that was much sought by the industries

other Stakeholders

- **Industries :** Provide real-world problem statements and potential resources.
- **Industry Mentors / Professors of Practice :** Guide and support students with domain-specific expertise.
- **Faculty Mentors :** Offer academic guidance and ensure adherence to educational goals.
- **Industry Relations Official (IR Official) :** Facilitate communication and coordination between stakeholders.
- **Institution :** Promote the successful students for Competitions, Industry Consultancies, Research Projects and Top placements

Guidelines

1. Problem Statement Submission:

- IR Official will approach the associated Industries to float few of their real time Problems along with detailed descriptions, expected outcomes, constraints, and any available resources.
- Ensure the problem aligns with societal impact and technological feasibility
- Validate and categorize submitted problems based on relevance, scope, and complexity with the support of the Professors of Practice.

2. Team Formation

a) Eligibility :

- i. Teams must consist of maximum of 3 students from diverse disciplines. A single student may also be allowed under special circumstances.
- ii. Each member in the team must have completed at least one project prior

b) Selection Process:

- i. Teams will submit a preliminary proposal outlining their approach to the problem along with their resume highlighting their prior knowledge on the domain and their individual role on the Project.
- ii. Expert committee will review and shortlist the appropriate teams for each Problem Statement (PS). (A maximum of 5 teams will be selected for each PS).

iii. The unselected student teams may approach again in the next cycle for the available PS at that time.

c) **Mentor Assignment:** Each team will be assigned

i. One Professor of Practice for domain expertise as applicable

ii. One faculty mentor for academic support

3. Ideation Phase

a) Conduct workshops on design thinking, problem-solving methodologies, Project Management and technological tools.

b) Mentors provide constructive feedback to refine ideas, fix timelines and a high level block diagram on the project flow.

4. Development Phase

a) **Resource Allocation:** Provide teams with access to necessary tools and labs.

b) **Funding Support:** Faculty mentor along with the team can apply for Seed fund from the Institution for up to Rs.50,000/- for prototype development.

c) **Mentor Engagement:** Schedule weekly meetings with faculty mentors and to fortnight meeting with Professor of Practice to ensure progress.

d) **Progress Reporting:** Teams submit bi-weekly progress reports to faculty mentors and industry mentors.

5. Evaluation and Presentation

a. Final Submission: Teams present their solutions through comprehensive reports and prototypes (if applicable).

b. Evaluation Panel: A panel comprising industry representatives, faculty, and external experts evaluates the solutions based on:

i. Innovation and creativity

ii. Feasibility and scalability

iii. Societal impact

c. Recognition:

i. Award top-performing teams with certificates

ii. Claim 2 to 13 Credits (2 Credits each for Minor Project and Summer Internship and 9 Credits for Major Project) under Independent Learning

- iii. Opportunity to involve in Industry Consultancy project teams,
- iv. Participate in National competitions like smart India Hackathon by skipping preliminary round,
- v. Funding for entrepreneurial development towards establishing your own start-up.

6. Post- Ideation Phase

- a. **Implementation Support** : Facilitate connections with industry for implementation of viable solutions.
- b. **Publication and Dissemination** : Encourage teams to publish their findings in journals. Entire team can claim three credits for publishing a paper. IR office will provide guidance and support in paper publication.
- c. **IPR Support** : Research and Development office will extend all the support towards filing a Patent (if applicable) till it gets granted. student may be granted with upto 2 credits for filing patent. if the patent concept is the part of minor project/summer internship.
- d. **Feedback Loop** : Gather feedback from all stakeholders to improve future iterations of the Ideation Process.

7. Benefits to Faculty Mentor

- a. Industry exposure and minimum 1 week Industrial training.
- b. Authorship in paper publications and patent.
- c. Workload balance.

8. Roles and Responsibilities

- a. Industries.
 - i Provide well-defined problem statements.
 - ii Offer mentorship and domain-specific insights.
 - iii Participate in evaluation and recognize successful teams.
- b. Professor of Practice.
 - i Guide students with practical knowledge and industry trends.
 - ii Ensure solutions align with real-world applicability.
- c. Faculty Mentors

- i Provide academic guidance and ensure adherence to educational standards.
- ii Monitor student progress and provide constructive feedback.

d. IR Official

- i Coordinate between stakeholders.
- ii Ensure adherence to policy guidelines.
- iii Facilitate resource allocation and logistical support.

e. Students

- i Actively participate in all phases of the process.
- ii Collaborate effectively within teams and with mentors.
- iii Adhere to deadlines and deliverables.

9. Code of Conduct

- a. Respect all stakeholders and maintain professionalism.
- b. Ensure originality and avoid plagiarism.
- c. Maintain confidentiality of industry-provided information.

7.2.6 Industry/Higher Learning Institute Interaction

7.2.6.1

The students shall earn a minimum of two credits by undergoing internship and/or specialized courses as mentioned in the following clauses 7.2.6.2 & 7.2.6.3, respectively.

7.2.6.2 Internship/In plant Training (IPT):

The students shall undergo Internship in the industry/higher learning institute approved by Industry-Institute Interaction Cell (IIIC) during any time after the second academic year.

7.2.6.3 Specialized Courses:

The students shall undergo the courses offered either by the industrial experts whose minimum academic qualification is Bachelor of Engineering or equivalent or faculty expert from higher learning institutions approved by IIIC. The students shall choose either one two credits course or one one credit course or two one credit courses.

7.2.7 Professional Proficiency Courses

The Professional Proficiency Courses which carry four credits, to be offered in four different semesters, starting from third semester. These courses offered in this category are relevant to develop skill in the profession.

7.2.8 Mandatory Courses

Courses under this category are mandatory for students belonging to diverse backgrounds to adjust themselves in the new environment of Engineering and Society. Credits earned by the students will be printed in grade sheet, but these credits will not be considered for computing the CGPA. Courses such as Engineer and Society, Constitution of India are comes under this category. *(Amended as per the 48th Meeting of the Academic Council held on February 22, 2025. (Item. No. 48.5))*

- a. *Students may be allowed to undertake any or all of these courses under this category through an UGC/AICTE approved MOOC Platform - SWAYAM/NPTEL for the duration of 4 weeks (1 Credit) or 8 Weeks (2 Credits) or 12 weeks (3 Credits) as per the requirement of the schools and approved by the respective Board of Studies.*
- b. *The above mandatory courses may be offered by our Industry Partners/ International Institutional partners (Under MoU/MoA arrangement entered by the office the University of Industry Relations / International Relations) and students shall be allowed to earn these NON-CGPA credits under the collaborative arrangements.*

7.2.9 Complementary Skill Courses

The courses offered under this category are to complement the knowledge, skill and attitude acquired through the regular curricular courses. The students shall take at least one course each from Groups I and II as given in Table 3. No credits shall be awarded for the courses under this category. The student shall fulfill the minimum requirements as prescribed in the evaluation guidelines for mere completion of the course which is mandatory for the award of the degree.

7.2.10 Special Curricular Accomplishments

7.2.10.1 Research Publications:

The students (Max. three in a team) shall be awarded credits if they publish a paper in any one of the journals (Scopus/SCI Indexed) approved by the Dean of the respective school. They will be exempted up-to a maximum of three credits

Table 3: List of Complementary Skill Courses

Group	Category
Group-I	Sports/Yoga
	National Cadet Corps
	National Service Scheme
	Extra Curricular Activities
Group-II	Value Added Courses
	Globally accepted Certification courses
	Co-curricular Activities
	Foreign Languages

in any course categories as per their wish, other than the Foundation Course and Program Core.

The number of credits, awarded to the students, is based on the recommendations of the expert committee constituted as per the direction of the Dean of the school. The expert committee shall review the published paper and shall give its recommendations for the award of credits. This shall be applicable to the first three authors only. The team shall work under the supervision of a guide (faculty member/resource person from Industry/Higher Learning Institute).

7.2.10.2 Innovation driven prototype/Business models

The students (Max. three in a team) shall be awarded credits if they successfully come out with Innovation driven prototype/Business models/Patents at the Veltech Technology Business Incubator (TBI). The prototype/Business models/Patents shall be certified by the Head and CEO of Veltech TBI, recommended by the HoD and approved by the Dean of the respective school. They will be exempted up-to a maximum of four credits in the Minor projects/Summer Internship under 7.2.5 Independent Learning category. The grade for the minor project(s) may be awarded by the BoS of the respective school based on the recommendation from Head and CEO of Veltech TBI.

7.2.10.3 Start-up by the Student Inventors

Student(s) either as a single or team (Max. three) successfully come-up with a start-up at Veltech TBI, shall be awarded with credits. On submission of documents for the start-up, endorsement by TBI Manager, CEO & the Head of the Department where student(s) is (are) studying, the Dean of the School (s) may recommend to the Vice-chancellor for the exemption of Major Project under 7.2.5 Independent Learning category. The grade for the major project may be awarded by the respective BoS based on the recommendation from Head and CEO of Veltech TBI and Senior level faculty from the respective department nominated by the Dean of the school.

7.2.10.4 Skill based Vocational Courses:

The student accomplishment in a skill based vocational course in level 5 and above courses framed under National Skill Qualification Framework (NSQF), by National Skill Development Agency (NSDA), may be given three credits and grade points by BOS in the appropriate course category mentioned in Section 7.2. other than the Foundation Courses (Section 7.2.1) and Programme Core (Section 7.2.2).

7.3 Minimum Credits Required in Various Course Categories**7.3.1 Regular Students**

The students shall earn credits in various course categories as indicated in Table 4.

Table 4: Minimum credits required for Regular students in various course categories

Section Number	Course Category	Minimum Credits Required
7.2.1	Foundation Courses (FC)	56
7.2.2	Programme Core (PC)	58
7.2.3	Programme Elective (PE)	18
7.2.4	Open Elective (OE)	12
7.2.5	Independent Learning (IL)	14
7.2.6	Industry/Higher Institute Learning Interaction (IHL)	2
7.2.7	Professional Proficiency Courses (PPC)	4
Total		164

7.3.2 Lateral Entry Students

The students shall earn credits in various course categories as indicated in Table 5.

Table 5: Minimum credits required for Lateral Entry students in various course categories

Section Number	Course Category	Minimum Credits Required
7.2.1	Foundation Courses (FC)	22
7.2.2	Programme Core (PC)	48
7.2.3	Programme Elective (PE)	18
7.2.4	Open Elective (OE)	12
7.2.5	Independent Learning (IL)	14
7.2.6	Industry/Higher Institute Learning Interaction (IHL)	2
7.2.7	Professional Proficiency Courses (PPC)	4
Total		120

7.4 Options for students in Four year UG Engineering & Technology Programme and Eligibility

In order to provide the flexibility, multidisciplinary and a holistic education, so that learners have the ability to choose their learning trajectories, programmes, and choose their own path, the following options for students in 4 year UG Engineering & Technology programmes are provided.

7.4.1 Four-year program in B.Tech.

The Four-year B.Tech. programmes are designed to attain the satisfactory level of programmes specific criteria recommended by professional bodies of the respective programme. The curriculum structure consists of various course categories like Foundation Courses, Programme Core, Programme Electives, etc., as described in Sections 7.2.1 to 7.2.9 to cover the depth and breadth required for the programme and for the attainment of programme outcomes. A Bachelor of Technology, commonly abbreviated as B.Tech. is an undergraduate academic degree conferred after the completion of a four-year (for Regular Students) or three-year (for Lateral Entry Students) program of studies.

7.4.2 B.Tech Programme with Specialization

The programme specialization is offered in all B.Tech. programmes. The core objective of the programme specialization is to provide depth of knowledge in the chosen area of specialization for the academically motivated students and it is an optional feature in the B.Tech. Program.

7.4.2.1. The students enrolled for the program specialization shall earn eighteen (18) credits from the programme elective category in the particular specialization area as indicated in the Table 6 and recommended by the respective Board of Studies (BoS).

Table 6: Eligibility credit details for Programme specialization

Section Number	Course Category	Minimum Credits Required
7.2.3	Programme Elective	18
7.2.5	Independent Learning	13
Total		31

7.4.2.2 Students shall register a maximum of 6 credits in a semester starting from IV Semester and complete all credits under programme specialization within the duration as mentioned in Section 4.

7.4.2.3 Attendance and evaluation shall be as per regular courses.

7.4.2.4 Student registered for programme specialization shall pass in all courses recommended for the requirement for the programme specialization.

7.4.2.5 In the case of withdrawal from the programme specialization by a student/cancellation of specialization, division will be awarded as per his/her Major degree programme registered.

7.4.2.6 No migration between specialization is permitted once after the registration for programme specialization is completed.

7.4.3 B.Tech. Programme with Minor Degree

The Minor Degree programme is introduced in the curriculum of all B. Tech. programs offering a Major degree. The core objective of Minor degree programme is to provide additional learning opportunities for academically motivated students across the breadth of the engineering and to provide the interdisciplinary knowledge. It is an optional feature in the B.Tech. Program.

7.4.3.1 The students enrolled for the program with minor degree shall earn eighteen (18) additional credits in any emerging area in other programmes apart from the admitted major programme, provided the student meet the requirements, in addition to the minimum credits required under Section 7.3.1/7.3.2

as recommended by the BoS offering the minor degree programme.

7.4.3.2 Students with 7.0 CGPA without any backlogs as on II Semester are eligible to apply. In the case of lateral entry students, he/she should have minimum 7.0 CGPA in the Entry level qualifying examination.

7.4.3.3 Students need to maintain the CGPA of minimum 7.5 and above including minor degree courses, without any backlogs. Otherwise minor degree will be cancelled. In this case, the additional credits earned (if any) will be printed in the consolidated grade card.

7.4.3.4 Students shall register a maximum of 6 credits in a semester starting from IV Semester and complete all credits under minor degree within the minimum duration as mentioned in Section 4, along with the major degree programme.

7.4.3.5 Students who have opted to obtain “Minor Degree” will earn an additional 18 Credits in the specified domain other than their Major, by studying the prescribed courses as specified below either in (a) or (b) or both. *(Amended as per the 48th Meeting of the Academic Council held on February 22, 2025. (Item. No. 48.5))*

- (a) *Separate class work and time table shall be arranged for the various Minor courses. Attendance regulations and evaluation shall be as per regular courses. (Physical Mode) (The No. of courses may not be more than 1) [OR]*
- (b) *Students may be allowed to earn these 18 credits or part of these, pertaining to minor degree, through an UGC/AICTE approved MOOC platform – SWAYAM/NPTEL, by studying prescribed courses of the minor degree, for the duration of 8 to 12 weeks with certifications as approved by the respective board of studies (BoS). The school/department concerned shall notify this well in advance. (MOOC Basis). [OR]*
- (c) *The courses may be offered by our Industry Partners/International Institutional partners (Under MoU/MoA arrangement entered by the office the University of Industry Relations / International Relations) and students shall be allowed to earn these credits under the collaborative arrangements. It is suggested to advise the students to take at least one course worth 3 credits though it is not mandatory.*

7.4.3.6 Student registered for minor degree shall pass in all courses recommended for the requirement for the minor degree. No division (i.e., first class, second class, etc.) shall be awarded for minor degree.

7.4.3.7 In the case of withdrawal from the minor degree by a student/cancellation of minor degree due to non-maintenance of CGPA eligibility as per section 7.4.3.3, division will be awarded as per his/her major degree programme.

7.4.3.8 No migration between minor degree is permitted once after the registration is completed.

7.4.4 B.Tech. Programme with Honours

Programme with Honours is introduced in the curriculum of all B. Tech. programs. The core objective of Honours in a programme is to provide additional learning opportunities for academically motivated students in the emerging/research areas of the programme registered and it is an optional feature in the B.Tech. Program.

7.4.4.1 The students enrolled for the program shall earn eighteen (18) extra credits in their Major degree programme in addition to the minimum credits required under Section 7.3.1/7.3.2 as recommended by the respective Board of Studies (BoS).

7.4.4.2 Students with 7.5 CGPA without any backlogs as on II Semester are eligible. In the case of lateral entry students, he/she should have minimum 7.5 CGPA in the Entry level qualifying examination.

7.4.4.3 Students need to maintain the CGPA of minimum 8.5 and above including the Honours courses without any backlogs. Otherwise Honours will be cancelled. In this case, the additional credits earned (if any) will be printed separately in the consolidated grade card.

7.4.4.4 Students shall register a maximum of 6 credits in a semester starting from IV Semester and complete all credits under Honours within the minimum duration as mentioned in Section 4, along with the major degree programme.

7.4.4.5 *Students who have opted to obtain “Honors Degree” will earn an additional 18 Credits in the Major domain, by studying the prescribed courses as specified below either in (a) or (b) or both.*

- (a) *Separate class work and time table shall be arranged for the Honours courses. Attendance regulations and evaluation shall be as per regular courses (Physical Mode) (The no. of courses may not be more than 1 course).*
- (b) *Students may be allowed to earn these 18 credits pertaining to the major or related specialization, through an UGC/AICTE approved MOOC platform*

– SWAYAM/ NPTEL, by studying prescribed courses of the pertaining to the major/specialization, for the duration of 8 to 12 weeks with certifications as approved by the respective board of studies (BoS). The school/department concerned shall notify this well in advance.

- (c) *The courses may be offered by our Industry Partners/International Institutional partners (Under MoU/MoA arrangement entered by the office the University of Industry Relations / International Relations) and students shall be allowed to earn these credits under the collaborative arrangements. It is suggested to advise the students to take at least one course worth 3 credits though it is not mandatory.*

7.4.4.6 Student registered for Honours shall pass in all courses recommended for the requirement for the Honours. No division (i.e., first class, second class, etc.) shall be awarded for Honours.

7.4.4.7 In the case of withdrawal from the Honours by a student/cancellation of Honours due to non maintenance of eligibility as per section 7.3.5.3, division will be awarded as per his/her Major degree programme registered.

7.4.4.8 No migration is permitted once after the registration for Honours is completed.

7.5 Intensive Semester (Short summer term(s))

- * The student who have completed 138 credits (for regular students as per table 4) and 94 credits (for lateral entry students as per table 5) other than Independant courses are eligible to register in intensive semester.
- * The Intensive Semester is arranged every year to facilitate the students for early completion of credit requirements.
- * The student can register the courses upto a maximum of 12 credits during the vacation period of the student after the regular semester examination.

7.6 Medium of Instruction and Examination

The medium of instruction and examination is English.

8 EXAMINATIONS AND SCHEME OF EVALUATION

8.1 Description

8.1.1

Continuous Evaluation (CE) shall be conducted by the course handling faculty/course coordinator all through the semester; it includes tests, midterm tests, assignments, projects and other means covering the entire syllabus/all the course outcomes.

8.1.2

Semester End Examination (SE) shall be conducted by the Controller of Examinations at the end of a semester, as per the academic calendar and it includes a written examination for theory courses, and practical examination and viva voce for laboratory/project courses.

8.2 Scheme of Continuous Evaluation

8.2.1

For all the theory courses, the continuous evaluation shall be for a maximum of 40 marks consisting of three tests having the duration of 90 minutes, One Assignment cum presentation and regularity of students. The tests shall be conducted on the dates mentioned in the academic calendar and assignment submission date shall be given by the course faculty.

8.2.2

There shall be three tests each carrying 30 marks. Average of all three tests marks shall be considered for continuous evaluation. It shall measure the knowledge of the students in understand and above levels as mentioned against the respective course outcomes, in cognitive learning domain, as per the revised Bloom's taxonomy. The test shall consist of two parts – Part A and Part B. Part A shall cover remember and understand level questions and shall consist of five questions each carrying two marks. Part B shall cover understand and above levels questions as mentioned against the respective course outcomes and it shall consist of five questions each carrying five marks, out of which students shall answer any four questions.

8.2.3

There shall be one assignment cum presentation which carries five marks. The assignment shall measure the knowledge of the students in apply and above levels, in cognitive learning domain, as per the revised Bloom's taxonomy carries five marks. Students need to present the assignment as short oral presentation in the class which carries five marks. The rubrics for the presentation shall be prepared and informed to the students in advance. The average marks secured

in assignment and presentation shall be considered for continuous evaluation.

8.2.4

Attendance marks for each theory course shall be awarded as given in Table 7.

Table 7: Attendance marks for theory courses

Attendance (%)	Marks
90% and above	5
80 to 89%	4
75 to 79%	3
Below 75%	No Mark

8.2.5

For all the laboratory courses, the continuous evaluation shall be for a maximum of 40 marks consisting of student's performance in each laboratory session and model test.

8.2.6

For each experiment in a laboratory course, maximum of 15 marks shall be awarded as per the rubrics shown in the Table 8. The average of all the experiment marks shall be considered for continuous assessment. The rubric shall be informed to the students well in advance before the evaluation.

Table 8: Rubrics for evaluation of laboratory experiment

Performance in conducting experiment (5)	Result and analysis (3)	Viva Voce (3)	Observation (4)
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8.2.7

In each laboratory course, model laboratory test shall be conducted for maximum of 25 marks on appropriate dates as mentioned in the academic calendar. A rubric, prepared considering the performance indicators given in Table 9, shall be informed to the students well in advance before the evaluation.

8.2.8

For the integrated courses which have more than 50% credit contribution from

Table 9: Rubrics for evaluation of model laboratory test experiment

Performance in conducting experiment (15)	Result and analysis (5)	Viva Voce (5)
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lecture classes, the continuous evaluation shall be for a minimum of 40 marks consisting of two mid-term tests having the duration of 90 minutes, Assignments, Attendance and one practical test. The tests shall be conducted on the dates mentioned in the academic calendar.

Two Mid Term Test (20 marks each)	Attendance	Assignment	Model Lab
10 marks	5 marks	5 marks	20 marks

Mid-term Tests: There shall be two mid-term tests each carrying 20 marks. The average marks secured in mid-term tests shall be considered for continuous evaluation. It shall measure the knowledge of the students in all levels as mentioned against the respective course outcomes, in cognitive learning domain, as per the revised Bloom's taxonomy. The test shall consist of two parts – Part A and Part B. Part A shall cover remember and understand level questions and carry five marks. Part B shall cover understand and above levels questions as mentioned against the respective course outcomes and it shall consist of four questions each carrying five marks, out of which students shall answer any three questions.

Practical Test: A practical test shall be conducted for maximum of 20 marks on appropriate dates as mentioned in the academic calendar. A rubric, prepared considering the performance indicators given in Table 11, shall be informed to the students well in advance before the evaluation.

Table 11: Rubrics for evaluation of laboratory test experiment in theory dominated integrated course

Performance in conducting experiment (5)	Result and analysis (5)	Viva Voce (5)	Record (5)
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8.2.9

For the integrated courses which have more than 50% credit contribution from practical classes, the continuous evaluation shall be for a maximum of 40 marks consisting of students' performance in each laboratory session and model test as mentioned in Sections 8.2.5, 8.2.6 and 8.2.7.

8.2.10

For project work, Head of the department shall constitute the Project Review Committee (PRC) consisting of two faculty members with diversified specializations and the project guide. Continuous evaluation for 40 marks shall be done as given in Table 12.

Table 12: Continuous assessment scheme for project work

Review I	Review II	Assessment by Project Guide	Total
10 Marks	15 Marks	15 Marks	40 Marks

Rubrics shall be prepared by Project Review Committee using appropriate performance indicators for Review I and II separately and informed to the students well in advance. Average marks of Project Review Committee members shall be scaled to 10 marks for Review I and 15 marks for Review II. Separate Rubrics shall also be prepared by the individual project guide with appropriate performance indicators based on the nature of the project work and shall be approved by the PRC. Project guide shall evaluate for maximum of 15 marks during the entire project period.

8.3 Scheme of Semester End Examination

8.3.1

For all the theory, practical, and project courses, the semester end examination shall be for a maximum of 60 marks. For internship/industrial training and industry offered courses, the semester end examination shall be for a maximum of 100 marks.

8.3.2

The semester end examination for theory courses shall be conducted for maximum of 60 marks on dates as mentioned in the academic calendar. It shall measure the knowledge of the students in all levels as mentioned against the respective course outcomes, in cognitive learning domain, as per the revised Bloom's taxonomy. The examination shall consist of two parts – Part A and B.

Part A - Part A shall cover remember and understand level questions and consist of ten questions, two questions from each unit, carry 20 marks.

Part B - Part B shall cover understand and above levels questions and consist of five questions of either or type, one from each unit, and carry 40 marks.

- * The questions in Part A, and Part B shall evenly address all the course outcomes.
- * However, a different pattern of question paper can be recommended by the BOS to meet the course specific requirement of any particular course(s) to the Vice-Chancellor.

8.3.3

The semester end examination for laboratory courses shall be conducted for maximum of 60 marks on appropriate dates as mentioned in the academic calendar and shall be evaluated as per the rubrics given in Table 13.

Table 13: Rubrics for evaluation of semester end laboratory examination

Performance in conducting experiment (30)	Result and analysis (15)	Record (5)	Viva Voce (10)
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8.3.4

For the integrated courses which have more than 50% credit contribution from lecture classes, the semester end examination shall be conducted for a maximum of 60 marks as same as for theory courses.

8.3.5

For the integrated courses which have more than 50% credit contribution from practical classes, the semester end examination shall be conducted for a maximum of 60 marks on appropriate dates as mentioned in the academic calendar. Rubrics, prepared for model test, shall be used with proper scaling based on mark distribution as given in Table 14.

Table 14: Rubrics for evaluation of semester end laboratory examination in practical dominated course

Part-A	Part-B		
Theory questions to evaluate the knowledge and understanding (20)	Performance in conducting experiment (25)	Result and analysis (10)	Viva-Voce (5)

8.3.6

For evaluation of project works, semester end Project Evaluation Committee (PEC) shall be constituted with three examiners; one member from PRC (Section 8.2.10) nominated by HoD, one member nominated by VC and project guide. For each student in a project team, the semester end evaluation for 60 marks shall be conducted on dates as mentioned in the academic calendar. Separate Rubrics shall be prepared and made available for semester end project evaluation. Average marks of Project Evaluation Committee members shall be scaled to 60 marks.

8.3.7

For evaluation of Industry/Higher Learning Institute Interaction courses, student shall submit the comprehensive report to the department within a week time after the completion of the internships. Two credits shall be awarded to the student who underwent either one spell of internship which has a minimum of ten days duration with at least 8 hrs per day or two spells which have a minimum duration of five days each with at least 8 hrs per day. Based on the Rubrics prepared for the purpose, the report shall be evaluated for 100 marks by a three-member review committee constituted by the Head of the Department.

8.3.8

The semester end examination for courses under specialized courses category shall be evaluated for 100 marks by the industrial/faculty experts who offered the course or by the faculty nominated by the Head of the department in consultation with the course handling faculty. The question paper pattern shall be decided by the course handling faculty at the beginning of the course and the same shall be approved by the Head of the department.

8.3.9

The semester end examination for the Open Elective shall be evaluated for 60 marks by the faculty experts who offered the course or by the faculty nominated by the Head of the department.

8.3.10

The semester end examinations for the Professional Proficiency courses and Mandatory courses (Section of 7.2.7 and 7.2.8), shall be evaluated in the similar way of Industry/Higher Institute Learning Interaction courses as described in the Section 8.3.8.

8.4 Scheme of Evaluation for Complementary Skill Courses

No credits shall be awarded for the courses under this category. The student shall fulfill the minimum requirements as prescribed in the guidelines below for mere completion of the course which is mandatory for the award of the degree.

8.4.1 Sports

Table 15: Sports

1.	Prerequisites / Eligibility conditions	A bonafide student of the University
2.	Details	Indoor Events/Outdoor Events – Athletics. Games: Football, Volleyball & Basket ball. Athletics: Sprint events, throws & Jumps. Indoor: Chess, Table Tennis,& Badminton.
3.	Total number of hours and minimum attendance requirement	20 Hours; Minimum attendance 75%
4.	Number of contact hours and practice hours per week	2 Hours
5.	Passing requirements	Representation of the University in Open Tournaments.

8.4.2 Yoga

Table 16: Yoga

1.	Prerequisites / Eligibility conditions	A bonafide student of the University.
2.	Total number of hours and minimum attendance requirement	30 Hours with two hours per week. Minimum Attendance: 75%

8.4.3 National Cadet Corps

Table 17: National Cadet Corps

Particulars	Exam
After Completion of 2 years NCC training and one NCC Camp	Eligibility for NCC B – Certificate Exam

8.4.4 National Service Scheme (NSS)

Table 18: National Service Scheme (NSS)

S.No	Condition / Attribute	Fulfilling Requirement(s)
1.	Prerequisites / Eligibility conditions	A bonafide student of the University.
2.	Details of the orientation programme	At least one programme per year
3.	Membership in NSS	One year
4.	Assessment procedure	As per NSS Norms, presence behavior
5.	Passing requirements	Must be participated in any 5 activities during the two years period.

8.4.5 Extra Curricular Activities

Table 19: Extra Curricular Activities

S.No	Condition / Attribute	Fulfilling Requirement(s)
1.	Prerequisites / Eligibility conditions	A bonafide student of the Institution for inter-college / inter-university competitions, students will be shortlisted based on their Previous achievements / the selection process.
2.	Details	As prescribed by the organization/department / clubs. Activities include Unnath Bharath Abiyan, Photography, Music, Dance, Literature club, Quiz club, TedEx Veltech Club, Debate club, Nature club and any other activity.
3.	Passing requirements	Participation in the University level activities with minimum of Two Events.

8.4.6 English Proficiency Certification

Table 20: English Proficiency Certification

S.No	Condition / Attribute	Fulfilling Requirement(s)
1.	Pre-requisites / Eligibility conditions	As given by certification issuing authority. Students are eligible to appear for the BEC exam at any semester.

Table 21: English Proficiency Certification

S.No	Condition / Attribute	Fulfilling Requirement(s)
2.	Detailed course content / Syllabus	As given by the certifying authority
3.	Duration of the course, total number of hours and minimum attendance requirement	Two weeks intensive training; minimum attendance 80%.
4.	Number of contact hours and practice hours per week	45 hours of training followed by online assessment.
5.	Assessment Procedure – Tests, Examination	Examination conducted by the certifying authority.
6.	Passing requirements	A minimum score in TOEFL iBT, GRE. A minimum total score in IELTS. A minimum score in the examination conducted by the Cambridge University (BEC)/any certifying authority as approved by the BoS

8.4.7 Globally Accepted Certification Courses as approved by the respective Board of Studies

Assessment Procedure: Online / Written Examination conducted by the certifying authority.

8.4.8 Co-curricular Activities

Table 22: Co-curricular Activities

S.No	Condition/Attribute	Fulfilling Requirement(s)
1	Prerequisites/ Eligibility conditions	A bonafide student of the Institution
2	Details of the course	Co-curricular activities are divided into the following four(4) groups. 1. Professional Social Activities: Participation in activities of Professional Societies (National or International) like the Institution of Engineers,ISTE,IEEE,ASME,SAE, IETE, IME, etc., which contributes to the growth of the students.

Table 23: Co-curricular Activities

S.No	Condition/Attribute	Fulfilling Requirement(s)
2	Details of the course	<p>2. Paper Presentations/Publications: Preparation and presentation of papers in Symposia/Conferences/Publication.</p> <p>3. Value-Added Courses: Content and the details of various value-added courses to be specified by the workshop/Course Coordinator.</p> <p>4. Mini-projects/Model Development: A mini-project which is relevant to the branch of interest of the student; a simulation model developed by the student with the guidance of a faculty member and participated in any competitions.</p>
3	Assessment Procedure - Tests, Examination	<p>1. Professional Society Activities: Membership certificate from a professional society for a minimum period of 2 years. Evidence of active participation/involvement in all the activities organized by the professional society. A Completion Certificate from the respective in-charges will be required to clear this activity.</p> <p>2. Paper Presentations/Publications: Certificate of presentation of technical papers in symposia/seminars/conferences. A minimum of 1 paper in an inter-college or 2 papers in an intra-college technical event. [OR] Publication of technical articles in National/International magazines/journals/proceedings.</p> <p>3. Value-Added Courses Certificate of participation in Workshops and short-term courses (Internal or External). The total duration should be at least 3 days. A Completion Certificate from the respective in-charges will be required to clear this activity.</p>

3	Assessment Procedure - Tests, Examination	<p>The Program Director/ Staff in-charge of this activity is responsible for ensuring the minimum duration and performance of the students as per the guidelines framed by the departments with respect to the nature of the course.</p> <p>4. Mini-projects/Model Development: Developing a simple project/ prototype; computer simulation of a system using an industry-standard software package. An Evaluation Committee formed by the HOD to views this activity and the marks are awarded as follows: Report (40%), Presentation (30%) and Oral Examination (30%).</p>
4	Passing requirements	Satisfactory completion of any two of the four category given above.

8.5 Conditions for Pass

8.5.1

A candidate shall be declared to have passed in individual theory/drawing course if he/she secures a minimum of 50% aggregate marks (continuous evaluation and semester end examination marks put together), subject to a minimum of 45% marks in the semester end examination.

8.5.2

For the courses listed under Section 7.2.6, 7.2.7 and 7.2.8, a student shall be declared to have passed if he/she secures a minimum of 50% marks in the semester end examination.

8.5.3

A candidate shall be declared to have passed in individual lab/project course, if he/she secures a minimum of 50% aggregate marks (continuous evaluation and semester end examination marks put together), subject to a minimum of 50% marks in the semester end examination.

8.5.4

If a candidate fails to secure a pass in foundation courses (Section 7.2.1) and/or programme core courses (Section 7.2.2), it is mandatory that he/she shall reap-

pear for the examination in those courses during subsequent examinations conducted at the end of subsequent semesters.

8.5.5

If a candidate fails to secure a pass in the course(s) covered under Section 7.2.3 and 7.2.4, he/she shall reappear for the examination in those courses or register for any other course(s) in the respective category in the subsequent semesters.

8.5.6

If a candidate fails to secure a pass in the course(s) covered under Section 7.2.5, and 7.2.6, he/she shall re register same course(s) or for any other course(s) in the respective category in the subsequent semesters.

8.5.7

If a candidate fails to secure a pass in the course(s) covered under Section 7.2.7, and 7.2.8, he/she shall reappear for the examination in those courses in the respective category in the subsequent semesters.

8.5.8

On passing a course of a program, the student shall earn assigned credits for that course.

8.5.9

A candidate shall apply for revaluation of his/her semester end examination answer paper in a theory course, within the stipulated time from the declaration of results, on payment of prescribed fee along with prescribed application to the Controller of Examinations (COE).

8.6 Reregistration

8.6.1

Students are allowed to re-register for the courses, if the student desires so, to improve the continuous evaluation performance in Foundation Courses (section 7.2.1), Program Core (section 7.2.2), Programme Elective (Section 7.2.3), and Open Elective (Section 7.2.4) category in the subsequent semester on payment of the prescribed reregistration fee.

8.6.2

If a candidate fails to secure eligibility for semester end examinations (Ref. 9.1) in foundation courses (Section 7.2.1) and/or programme core courses (Section

7.2.2), it is mandatory that he/she shall reregister for the course(s) and examination in those courses during subsequent semesters on payment of the re-registration fee.

8.6.3

If a candidate fails to secure eligibility for the semester end examination (Ref. 9.1) in the course(s) covered under Section 7.2.3, and 7.2.4, he/she shall register for any other course(s)/same course in the respective category in the subsequent semesters on payment of applicable re-registration fee.

8.6.4

If a candidate fails to secure eligibility for semester end examinations (Ref. 9.1) in the courses covered under section 7.2.5 to 7.2.8, he/she shall reregister for the course(s) and examination in those courses during subsequent semesters on payment of re-registration fee.

9 CRITERIA TO ATTEND SEMESTER END EXAMINATION AND PROMOTION TO HIGHER SEMESTER

9.1 Eligibility for Semester End Examinations

9.1.1

A student shall secure a minimum of 75% attendance in a course in order to attend semester end examination of that particular course. Condonation of shortage in attendance may be recommended by the respective course handling faculty through proper channel on genuine medical grounds/participation in sports/co-curricular activities provided the student puts in at least 65% attendance and provided, the Vice Chancellor is satisfied with the genuineness of the reasons and the conduct of the student. Students shall have to pay requisite fee towards condonation.

9.1.2

If the attendance is below 65% in any course(s), the student will not be permitted to take the semester end examination of the particular course(s).

10 BREAK IN STUDY

10.1

A candidate is not normally permitted to temporarily break the study. However, if a candidate intends to temporarily discontinue the programme in the middle for valid reasons (such as accident or hospitalization due to prolonged ill health) and to rejoin the programme, he/she shall apply in advance to the Vice Chancellor through the Dean of the concerned school stating the reasons therefore in any case, not later than ten instruction days after starting of the academic session.

10.2

The candidate is permitted to take up the Break in study upto a maximum of two consecutive semesters to work with their start-up at Veltech TBI. The candidate needs to apply for the break in study with all necessary documents and recommendation from the Head Veltech TBI to the Vice Chancellor through the Dean of the concerned school stating the reasons therefore in any case, not later than ten instruction days after starting of the academic session.

10.3

The candidate permitted to rejoin the programme after the break shall be governed by the rules and in force at the time of rejoining.

10.4

The duration specified for passing all the courses for the purpose of classification as mentioned in Section 13 shall not be altered by the period of such break of study permitted.

10.5

The total period for completion of the programme reckoned from the commencement of the first year to which the candidate was admitted shall not exceed the maximum period specified in Section 4 irrespective of the break of study in order that he/she may be eligible for the award of the degree (as mentioned in Section 13).

11 TRANSITORY

For transitional students, a Transitional Committee shall be formed consisting of Dean of school and HOD of the department concerned. The committee shall refer to the guidelines of BOS and advise transitional students with regard to their curricula, courses and other requirements for the completion of degree. The decision of the committee shall be placed for ratification before BOS, Academic Council and BOM. Every such application shall be disposed of by the

Dean concerned in 15 days of receipt of application. While rejoining for the degree programme, a transitory student shall follow the same as that followed by regular students.

12 MIGRATION

The University academic programme offers Choice Based Credit System and transfer of credits. Transfer of credits enables a student to transfer the credit earned by him in one school to another and from one institution to another. This enables a student to migrate mid stream from other institutions to this University. Thus students from other universities within and outside India can also join programmes of their choice mid stream subject to eligibility but with facility to transfer the credits earned by such student in the university from which he is migrating.

The migration is permitted at the end of I year II semester only in the case of migration within University.

12.1 Cases of migration

- a) From one department of a School to another within the same School in the University
- b) From one department of a School to another School in the University
- c) From any other university in India to Vel Tech with or without change in Department
- d) From foreign universities to Vel Tech with or without change in Department as per AIU/Washington Accord membership/UGC equivalence.

12.2 Migration from one department of a school to another within the same school in the university

In case of an application by a student of the University for transfer from the branch of the school in which he has enrolled to another branch in the same school, a Migration Committee consisting of the Dean of the School and the HoD of the transferee Department shall refer to the guidelines of BOS and decide the courses the student would have to complete to qualify to receive a degree from the transferee department subject to the condition that the student fulfills the required number of credits for the new branch including those which can be transferred. The decision of the Migration Committee shall be placed

for ratification before the BOS, Academic Council and BOM. In each such case a specific order in writing shall be issued by the Registrar with the approval of the Vice Chancellor and communicated to the student, Dean, HOD of the transferee department, COE and Finance Departments. Every such application shall be disposed of by the Dean concerned in 15 days of receipt of application with prescribed processing fee.

12.3 Migration from one department of a school to another school in the university

In case of an application by a student of the University for transfer from the branch of the school in which he has enrolled to another branch in a different school, a Migration Committee consisting of the Dean of the School and the HOD of the transferee Department shall refer to the guidelines of BOS and decide the courses the student would have to complete to qualify to receive a degree from the transferee department subject to the condition that the student fulfills the required number of credits for the new branch including those which can be transferred. The decision of the Migration Committee shall be placed for ratification before the BOS, Academic Council and BOM. In each such case a specific order in writing shall be issued by the Registrar with the approval of the Vice Chancellor and communicated to the student, Dean, HOD of the transferee department, COE and Finance Departments. Every such application shall be disposed of by the Dean concerned in 15 days of receipt of application with processing fee.

12.4 Migration from any other university in India to Vel Tech with or without change in Department

In case of an application by a student of any other Indian university for migration into Vel Tech with or without change in Department of study, a Migration Committee consisting of the Registrar, Dean of the School and the HOD of the transferee Department shall refer to the guidelines of BOS and decide the courses the student would have to complete to qualify to receive a degree from the department to which migration is sought subject to the condition that the student fulfills the required number of credits for the new branch including those which can be transferred. The decision of the Migration Committee shall be placed for ratification before the BOS, Academic Council and BOM. In each such case a specific order in writing shall be issued by the Registrar with the approval of the Vice Chancellor and communicated to the student, Dean, HOD of the transferee department, COE and Finance Departments. Every such application shall be disposed of by the Dean concerned in 15 days of receipt of application with processing fee.

12.5 Migration from any foreign university to Vel Tech with or without change in Department

In case of an application by a student of any foreign university for migration into Vel Tech with or without change in Department of study, a Migration Committee consisting of the Vice Chancellor, Registrar, Dean of the School and HOD of the transferee Department shall refer to the guidelines of BOS and decide the eligibility of the candidate for migration, recognition status of the foreign university with AIU/Washington Accord membership /UGC, Programme / course equivalence, courses the student would have to complete to qualify to receive a degree from the department to which migration is sought for subject to the condition that the student fulfills the required number of credits for new branch including those which can be transferred. The decision of the Foreign University Migration Committee shall be placed for ratification before BOS, Academic Council and BOM. In each such case a specific order in writing shall be issued by the Registrar with the approval of the Vice Chancellor and communicated to the student, Dean of school, HOD of the transferee department, COE and Finance Departments. Every such application shall be disposed of by the Dean concerned in 15 days of receipt of application with processing fee.

12.6 Course work for migration students

Once the respective migration committee has finalized the course work required to be done by the migrant student for a particular programme and he/she has been admitted to, the student shall be permitted to do the courses in his/her pace spread over the balance period of his/her studies in which such courses are offered. While doing so, he/she may have the option to attend such course(s) by mutual arrangements with the faculty concerned. For Continuous Internal Assessment purposes, his attendance in the regular course shall be counted and he shall submit the assignments, write tests, appear for all practical and other examinations as the regular students of such course(s) do. Marks secured by this process shall be counted for the CIA.

13 ELIGIBILITY FOR AWARD OF B.Tech. DEGREE

The B.Tech degree shall be conferred on a candidate who has satisfied the following requirements.

13.1 Four-year program in B.Tech. - Regular Students

- a) A regular student shall secure minimum of 164 credits and fulfil the minimum credit requirement in each category as mentioned in Table 4.

AND

- b) A regular student shall register for mandatory courses and complementary skill courses as prescribed in Section 7.2.8 and 7.2.9 shall successfully complete the courses as per the assessment procedure given in Section 8.3 and 8.4.

AND

- c) A regular student shall secure a minimum CGPA of 6 in 10 point scale.

AND

- d) A regular student shall fulfil the duration of the programme requirements as given in the Section 4.

13.2 Three-year program in B.Tech. - Lateral Entry Students

- a) A lateral entry student shall secure minimum of 120 credits and fulfil the minimum credit requirement in each course category as mentioned in Table 5.

AND

- b) A lateral entry student shall register for mandatory courses and complementary skill courses as prescribed in Section 7.2.8 and 7.2.9, shall successfully complete the courses as per the assessment procedure given in Section 8.3 and 8.4.

AND

- c) A lateral entry student shall secure a minimum CGPA of 6 in 10 point scale.

AND

- d) A lateral entry student shall fulfil the duration of the programme requirements as given in the Section 4.

13.3 B.Tech. Programme with Specialization

The program specialization shall be awarded after the completion of programme as per Section 13.1/13.2 and the Student secures minimum credit requirement in course categories mentioned in Table 6 (Section 7.4.2.1) from the program specialization.

13.4 B.Tech Programme with Minor Degree

- a) Student shall secure minimum credits as per Section 13.1 a)/ Section 13.2 a).

AND

- b) Shall register for mandatory courses and complementary skill courses as prescribed in Section 7.2.8 and 7.2.9, shall successfully complete the courses as per the assessment procedure given in Section 8.3 and 8.4.

AND

- c) Students shall fulfil the eligibility given in section 7.4.3.

AND

- d) Student shall fulfil the duration of the programme requirements as given in the Section 4.

13.5 B.Tech. Programme with Honors

- a) Student shall secure minimum credits as per Section 13.1 a)/ Section 13.2 a).

AND

- b) Shall register for mandatory courses and complementary skill courses as prescribed in Section 7.2.8 and 7.2.9, shall successfully complete the courses as per the assessment procedure given in Section 8.3 and 8.4.

AND

- c) Students shall fulfil the eligibility given in section 7.4.4.

AND

- d) Student shall fulfil the duration of the programme requirements as given in the Section 4.

13.6 Award of Division

13.6.1

The criteria for award of division after the completion of programme as per Section 13.1/13.2 is as shown in Table 25 below.

Table 25: Criteria for award of division

CGPA nominations	Division
$6 \leq \text{CGPA} < 6.5$	Second Class
$6.5 \leq \text{CGPA} < 8$	First Class
$\text{CGPA} \geq 8$	Distinction*

*All the courses contributing to CGPA shall be cleared in the first appearance.

13.6.2

For the purpose of awarding "First Class with Distinction", the Award of Degree shall be fulfilled within the minimum duration of the programme.

13.6.3

The courses mentioned in the Foundation courses (section 7.2.1) and Programme Core courses (section 7.2.3) category must be cleared in the first appearance for the award of division "First Class with Distinction".

13.6.4

Break in Study candidate shall be awarded First Class with Distinction, if he/she secures the CGPA greater than or equal to 8, and has taken prior approval of Vice Chancellor as mentioned in Section 10.

13.6.5

For the purpose of awarding First, Second CGPA obtained in the examinations appeared within the maximum period allowed for the completion of course shall be considered.

13.7 Consolidated Grade Card

A consolidated grade card containing credits and grades obtained by the candidates shall be issued after completion of the four year B.Tech Programme along with additional credits earned (if any) printed in that.

14 DISCIPLINE

14.1

Every student is required to observe disciplined and decorous behavior both inside and outside the University and strictly adhere to the conduct rules in force from time to time and not to indulge in any activity which will tend to bring down the prestige of the University. The Board of Management shall constitute a disciplinary committee consisting of Dean and two Heads of department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify the University about the disciplinary action recommended for approval.

14.2

If a student indulges in malpractice in any of the Class tests / cycle tests / semester end examinations whether conducted by internal or external examiners including mock tests by trainers etc, such student shall be liable for punitive action as prescribed by the university from time to time under the General Code of Conduct.

14.3

Smoking, carrying/holding/drinking alcohol, ragging/eve teasing inside and outside the university campus is viewed as serious misconduct. Such students will be met with severe punishments and may lead dismissal from hostels/and university.

15 MALPRACTICES

15.1

The Dean of the school shall refer the cases of malpractices in Continuous Evaluation and Semester End Examinations to a Malpractice Enquiry Committee constituted by him/her for the purpose. Such committee shall follow the approved scales of punishment. The Dean of the school shall take necessary action, against the erring students based on the recommendations of the committee.

15.2

Any action on the part of student at an examination trying to get undue advantage in the performance or trying to help another, or derive the same through unfair means is punishable according to the provisions contained here under. The involvement of the Staff, who are in charge of conducting examinations, valuing examination papers and preparing/keeping records of documents relating to the examinations in such acts (inclusive of providing incorrect or misleading information) that infringe upon the course of natural justice to one and all concerned at the examination shall be viewed seriously and recommended for the award of appropriate punishment after thorough enquiry.

16 OTHER MATTERS

16.1

The physically challenged candidates who have availed additional examination time and a scribe during their higher secondary (+2) / qualifying en-

trance examinations shall be given similar concessions on production of relevant proof /documents.

16.2

Students who are suffering from contagious diseases shall not be allowed to appear either continuous or semester end examinations.

16.3

The Vice Chancellor shall deal with any academic problem/issues, which is not covered under these rules and , in consultation with the Directors, Deans and Heads of the departments in an appropriate manner, and subsequently such actions shall be placed before the Academic Council for ratification.

17 AMENDMENTS TO REGULATIONS

The Academic Council may, from time to time, revise, amend or change the , schemes of examination and/or syllabi.





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